

Application No.: 10/705,420
Amendment Dated: December 20, 2004
Reply to Notice of
Non-Compliance Dated: November 18, 2004

In the Claims:

The listing of claims will replace all prior versions and listings of the claims in the application:

1-20. (Cancelled).

21. (New) A method for case hardening a surface layer of a component consisting essentially of a cobalt chrome alloy, comprising the steps of:

activating the surface layer of the component by applying a layer of iron thereto; and
carburizing the activated surface layer of the component at a temperature and for a time insufficient for carbides to form on the surface layer.

22. (New) A method for case hardening a surface layer of a component consisting essentially of a cobalt chrome alloy, comprising the steps of:

activating the surface layer of the component by exposing the surface layer to a gaseous hydrogen halide mixture; and
carburizing the activated surface layer of the component at a temperature and for a time insufficient for carbides to form on the surface layer.